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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,835	03/08/2004	Vibha Goel	AVAN-01000D1	2489
26290	7590	01/10/2006		EXAMINER
PATTERSON & SHERIDAN, L.L.P. 3040 POST OAK BOULEVARD SUITE 1500 HOUSTON, TX 77056				PAYNE, DAVID C
			ART UNIT	PAPER NUMBER
				2638

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/796,835	GOEL, VIBHA	
	<b>Examiner</b>	<b>Art Unit</b>	
	David C. Payne	2638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 September 2005.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                         |                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)              |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____.                                                |

**DETAILED ACTION*****Response to Arguments***

1. Regarding the applicant's traverse of Mody US 20020181509 A1. Mody states ¶ 103,

The communication system 6 may either employ L such synchronization circuits 61, one for each OFDM demodulator 22 or it may employ certain parts of the synchronization circuit for all the OFDM demodulators 20 and certain parts that are common to the entire receiver 10. For example, the OFDM modulators 22 may include individual time synchronization circuits 66 and 72 and frequency offset correction circuit 74, but may share common frequency offset estimation circuits 68 and 70. Alternatively, the receiver 10 may simply comprise a single synchronization circuit 61.

2. After review of the passage in Thatcher col./line: 8/61-9/7, the examiner disagrees with the applicant

reading of the passage. While Thatcher's invention is hot pluggable, it makes no indication that certain elements could not be shared. It in no way defeats the purpose of having separate hot pluggable devices to have a common receiver. Furthermore, Mody teaches shared components as a design alternative.

3. The examiner finds that the reading of Harrigan, as teaching away from a common receiver part based on the passage of aligning fiber-optic coupler as speculation and does not defeat the proposed combination.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2638

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Thatcher et al. US 5,757,998 (Thatcher)* in view of Mody et al. US 20020181509 A1 (Mody).

*Re claims 1, 4 Thatcher disclosed:*

A system comprising a housing (*package, e.g., col./line: 3/5-15*);  
a receiver part (*optical receiver sub-assembly, e.g., col./line: 3/55-60*), associated with said housing, including at least a receiver array;  
a plurality of interface assemblies (*Figure 1B*), each interface assembly sized for receiving a transmitter part which have outer surfaces sized for allowing said transmitter part to slide into place within said housing (*Figure 1B*), and which can be selectively inserted and removed from said receiver part (*e.g., col./line: 5/10-15*), said housing including common circuitry operating to drive said interface assemblies (*e.g., col./line: 3/55-60*), and said housing including slide portions which guide said surfaces of each interface assembly into a location and allow connection to said interface assembly, and which allow said interface assemblies to be selectively slid into place and connected and subsequently remove.

Thatcher does not disclose that interface assembly including has its own heat sink portions, associated with transmitter circuitry on the interface assembly, which operate to dissipate heat from the interface assembly.

However, Thatcher, disclosed a package with integrated heat sink (*e.g., col./line: 7/1-5*). It would have been obvious to one of ordinary skill in the art at the time of invention to separate the Thatcher heat sinks onto each interface assembly to obtain the claimed invention. One is motivated as such since greater heat dissipation is achieved by placing each heat sink directly with each interface assembly rather than on the outer housing. Lacking any criticality, to make prior art parts separable does not make the claimed invention patentable over that prior art (*Nerwin v. Erlichman, 168 USPQ 177*).

Thatcher does not disclose a common receiver part.

Art Unit: 2638

Mody disclosed a communication system having receivers having a common part, see paragraph 103. It would have been obvious to one of ordinary skill in the art at the time of invention to utilize common parts in a receiver for efficiency and cost effectiveness.

6. Claims 2, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Thatcher et al. US 5,757,998 (Thatcher)* and Mody et al. US 20020181509 A1 (Mody) as applied to claim 1 above, and in further view of *Darcie, US 6,014,479 (Darcie)*.

*Re claims 2 and 5*, the modified invention of Thatcher and Mody did not disclose WDM transmitters.

Darcie disclosed WDM transmitters (e.g., col./line: 3/14-20).

It would have been obvious to one of ordinary skill in the art at the time of invention to use WDM transmitters in the Thatcher module to obtain the claimed invention. One is motivated as such since WDM networks offer high capacities and facilitate a wide variety of architectures (e.g., col./line: 1/14-20).

*Re claim 3*, Darcie disclosed transmitters operating at different wavelengths (e.g., col./line: 3/27-33).

7. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Harrigan et al. US 6,069,752 (Harrigan )* in view of Mody et al. US 20020181509 A1 (Mody).

*Re claims 1 and 4 Harrigan disclosed:*

A system comprising a housing (e.g., col./line: 6/15-37);  
a receiver part (e.g., col./line: 6/30 ), associated with said housing, including at least a receiver array; a plurality of interface assemblies (*Figure 7*), each interface assembly sized for receiving a transmitter part which have outer surfaces sized for allowing said transmitter part to slide into place within said housing , and which can be selectively inserted and removed from said receiver part (e.g., col./line: 6/15-37), and said housing including slide portions which guide said surfaces of each interface assembly into a location and allow connection to said interface assembly, and which allow said

Art Unit: 2638

interface assemblies to be selectively slid into place and connected and subsequently remove. Each interface assembly including its own heat sink (Figure 7, #10).

*Harrigan* does not disclose a common receiver part.

Mody disclosed a communication system having receivers having a common part, see paragraph 103. It would have been obvious to one of ordinary skill in the art at the time of invention to utilize common parts in a receiver for efficiency and cost effectiveness.

*Harrigan* does not disclose a common drive circuitry. However, It would have been obvious to one of ordinary skill in the art at the time of invention to integrate the drive circuitry to obtain the claimed invention. One is motivated as such since it is not novel to separate or group parts and that common drive circuitry reduces component cost and board space.

*Re claims 2, 3, and 5 Harrigan* disclosed:

transmitters that operate as blue and green laser beams (e.g., col./line: 4/55-60).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2638

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp



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